

Remarks

I. Status

In the Office Action dated July 18, 2006, the Examiner: (i) rejected claims 1-23 under 35 U.S.C. 103(a) as being unpatentable over Patent No. 6,721,740 ("Skinner") in view of Patent No. 6,029,175 ("Chow"). Applicant has amended claims 1, 3, 5, 7-11, 13-16, 19, and 23; cancelled claims 6, 12, and 18; and added new claims 24-26.

Claims 1-5, 7-11, 13-17, and 19-26 will be pending after entry of this Amendment.

II. Rejections under 35 U.S.C. 103(a)

A. The proposed combination fails to teach or suggest all claim elements

In conventional subject-observer systems, each subject maintained a list of observers and, when the subject's state changed, notified each observer of its state change. This notification occurred regardless of the observer's particular interest or the observer's capacity to handle the update. The observers would then request the updated information, again regardless of the observer's particular interest or the observer's capacity to handle the update. The subject's updates are then issued, only to be discarded by that observer. This drawback made conventional designs inflexible and inefficient, particularly in modern "distributed" systems because the remote messages are comparatively slow.

The claimed inventions, as amended, overcome these drawbacks by introducing observer created and controlled aspect objects into a subject/observer implementation.¹ In operation, each

¹ *Claim 1* ("an aspect object created by the observer and adapted for attachment to the subject, the aspect object further adapted to receive the configuration information from the observer and to selectively communicate the update information to the observer based on the configuration information");

Claim 10 ("an aspect object created by the observer and attached to the subject code segment, the aspect object configured receive the update message from the subject code segment and to selectively communicate update information to the observer based at least in part upon an attribute of the observer and the received information");

Claims 13 and 19 ("in an observer, generating instructions to create an aspect object, communicating configuration information from the observer to the aspect object, the configuration information comprising an attribute of the observer; [and] attaching the aspect object to a subject"); and

Claim 23 ("in an observer object, generating instructions to create an aspect object; communicating

observer creates one or more aspect objects (i.e., both data and the procedures to manipulate that data) and then issues instructions to attach the aspect object(s) to the subject. These aspect objects, in turn, provide the observer with virtually unlimited flexibility to specify what specific type of information it wants, in what form the information it wants that information sent, and how frequently it wants the information to be sent.

Turning now to the proposed combination, the primary reference is an example of the traditional subject-observer system discussed in more detail in Applicant's Background Section at pgs. 3-4. As such, it fails to teach any method for observer to implement and register criteria based on the attributes of the observer, *See Office Action mailed July 18, 2006 at pg. 5*, much less the claimed aspect objects. The secondary reference, Chow, also fails to teach and suggest the claimed observer-created aspect objects. Instead, Chow teaches a cache manager that allows a browser to specify preferences for one of a predetermined number of options, including an update frequency. However, in this system, the observer is still limited by the options provided by the cache manager. The observer registers its interest using a 'check box flag' embedded in an HTTP document, not by creating an aspect object and attaching that object to the observer.

2. There would be no motivation to make the proposed combination.

As explained in the Background Section, the present invention is directed at object-oriented ("OO") programming techniques. *E.g., pg. 2*. The essence of these techniques is the use of objects, which generally contain some information and a set of operations capable of manipulating that data. The secondary reference, in contrast, is essentially directed at a web proxy cache. *Chow, col. 3, lines 6-63*. As such, the 'objects' in Chow are files previously accessed from network and internetwork servers. These are fundamentally different than 'objects' in an OO programming sense. Because Chow is non-analogous art, Applicant respectfully submits that there would be no motivation to make the proposed combination. *MPEP § 2141.01(a)(I)*.

configuration information from the observer object to the aspect object, the configuration information including a desired type indicator and a desired communication rate indicator; attaching the aspect object to the subject object") (element numbers removed).

III. Miscellaneous Amendments

Applicant has also made numerous amendments to improve readability and/or to correct antecedent basis in view of the changes to the independent claims. Applicant does not believe that these amendments will change the scope of the claimed inventions.

IV. Conclusion

Applicant believes that the present application is now in condition for allowance and respectfully requests allowance of each of the pending claims. Applicant also invites the Examiner to call Applicant's attorney at the number listed below if the Examiner believes that a telephone interview would be helpful in expediting allowance of the present application.

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Respectfully submitted,

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